
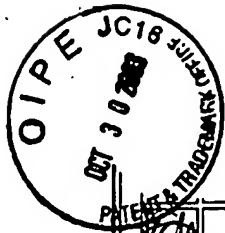


## ELECTRONIC INFORMATION DISCLOSURE STATEMENT

Electronic Version v18

Stylesheet Version v18.0

Title of Invention	Apparatus and Method for Monitoring a Treatment Process in a Production Interval																																																																								
<p>Application Number: 10/624109 </p> <p>Confirmation Number: 6120</p> <p>First Named Applicant: David McMechan</p> <p>Attorney Docket Number: 1301-1135</p> <p>Art Unit: 3672</p> <p>Examiner: Awaiting Assignment</p> <p>Search string: ( 1975162 or 2342913 or 2344909 or 4102395 or 4428428 or 4558742 or 4627488 or 4932474 or 4945991 or 5082052 or 5113935 or 5161613 or 5161618 or 5165476 or 5333688 or 5343949 or 5355956 or 5390966 or 5419394 or 5443117 or 5476143 or 5515915 or 5588487 or 5636691 or 5755286 or 5842516 or 5848645 or 5865251 or 5868200 or 5890533 or 5921318 or 5934376 or 5988285 or 6003600 or 6047773 or 6059032 or 6116343 or 6125933 or 6220345 or 6227303 or 6230803 or 6302208 or 6343651 or 6450263 or 6464007 or 6516881 or 6516882 or 6557634 or 6581689 or 6588506 or 6588507 or 20020157837 ).pn.</p> <p><b>US Patent Documents</b></p> <p>Note: Applicant is not required to submit a paper copy of cited US Patent Documents</p> <table border="1"><thead><tr><th>init</th><th>Cite.No.</th><th>Patent No.</th><th>Date</th><th>Patentee</th><th>Kind</th><th>Class</th><th>Subclass</th></tr></thead><tbody><tr><td><input checked="" type="checkbox"/></td><td>1</td><td>1975162</td><td>1934-10-02</td><td>Layne</td><td></td><td></td><td></td></tr><tr><td><input type="checkbox"/></td><td>2</td><td>2342913</td><td>1944-02-29</td><td>Williams et al.</td><td></td><td></td><td></td></tr><tr><td><input type="checkbox"/></td><td>3</td><td>2344909</td><td>1944-03-21</td><td>Williams et al.</td><td></td><td></td><td></td></tr><tr><td><input type="checkbox"/></td><td>4</td><td>4102395</td><td>1978-07-25</td><td>Robinson</td><td></td><td></td><td></td></tr><tr><td><input type="checkbox"/></td><td>5</td><td>4428428</td><td>1984-01-31</td><td>Smyrl et al.</td><td></td><td></td><td></td></tr><tr><td><input type="checkbox"/></td><td>6</td><td>4558742</td><td>1985-12-17</td><td>Huang et al.</td><td></td><td></td><td></td></tr><tr><td><input type="checkbox"/></td><td>7</td><td>4627488</td><td>1986-12-09</td><td>Szarka</td><td></td><td></td><td></td></tr><tr><td><input type="checkbox"/></td><td>8</td><td>4932474</td><td>1990-06-12</td><td>Schroeder, Jr. et al.</td><td></td><td></td><td></td></tr></tbody></table>		init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass	<input checked="" type="checkbox"/>	1	1975162	1934-10-02	Layne				<input type="checkbox"/>	2	2342913	1944-02-29	Williams et al.				<input type="checkbox"/>	3	2344909	1944-03-21	Williams et al.				<input type="checkbox"/>	4	4102395	1978-07-25	Robinson				<input type="checkbox"/>	5	4428428	1984-01-31	Smyrl et al.				<input type="checkbox"/>	6	4558742	1985-12-17	Huang et al.				<input type="checkbox"/>	7	4627488	1986-12-09	Szarka				<input type="checkbox"/>	8	4932474	1990-06-12	Schroeder, Jr. et al.			
init	Cite.No.	Patent No.	Date	Patentee	Kind	Class	Subclass																																																																		
<input checked="" type="checkbox"/>	1	1975162	1934-10-02	Layne																																																																					
<input type="checkbox"/>	2	2342913	1944-02-29	Williams et al.																																																																					
<input type="checkbox"/>	3	2344909	1944-03-21	Williams et al.																																																																					
<input type="checkbox"/>	4	4102395	1978-07-25	Robinson																																																																					
<input type="checkbox"/>	5	4428428	1984-01-31	Smyrl et al.																																																																					
<input type="checkbox"/>	6	4558742	1985-12-17	Huang et al.																																																																					
<input type="checkbox"/>	7	4627488	1986-12-09	Szarka																																																																					
<input type="checkbox"/>	8	4932474	1990-06-12	Schroeder, Jr. et al.																																																																					



	9	4945991	1990-08-07	Jones
	10	5082052	1992-01-21	Jones et al.
	11	5113935	1992-05-19	Jones et al.
	12	5161613	1992-11-10	Jones
	13	5161618	1992-11-10	Jones et al.
	14	5165476	1992-11-24	Jones
	15	5333688	1994-08-02	Jones et al.
	16	5343949	1994-09-06	Ross et al.
	17	5355956	1994-10-18	Restarick
	18	5390966	1995-02-21	Cox et al.
	19	5419394	1995-05-30	Jones
	20	5443117	1995-08-22	Ross
	21	5476143	1995-12-19	Sparlin et al.
	22	5515915	1996-05-14	Jones et al.
	23	5588487	1996-12-31	Bryant
	24	5636691	1997-06-10	Hendrickson et al.
	25	5755286	1998-05-26	Ebinger
	26	5842516	1998-12-01	Jones
	27	5848645	1998-12-15	Jones
	28	5865251	1999-02-02	Rebardi et al.
	29	5868200	1999-02-09	Bryant et al.
	30	5890533	1999-04-06	Jones
	31	5921318	1999-07-13	Ross
	32	5934376	1999-08-10	Nguyen et al.
	33	5988285	1999-11-23	Tucker et al.
	34	6003600	1999-12-21	Nguyen et al.
	35	6047773	2000-04-11	Zeltmann et al.
	36	6059032	2000-05-09	Jones
	37	6116343	2000-09-12	Van Petegem et al.
	38	6125933	2000-10-03	Ross
	39	6220345	2001-04-24	Jones et al.
	40	6227303	2001-05-08	Jones
	41	6230803	2001-05-15	Morton et al.
	42	6302208	2001-10-16	Walker et al.
	43	6343651	2002-02-05	Bixenman
	44	6450263	2002-09-17	Schwendemann



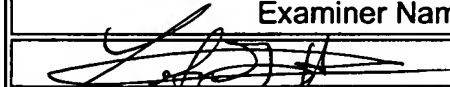
<input checked="" type="checkbox"/>	45	6464007	2002-10-15	Jones
<input type="checkbox"/>	46	6516881	2003-02-11	Hailey, Jr.
<input type="checkbox"/>	47	6516882	2003-02-11	McGregor et al.
<input type="checkbox"/>	48	6557634	2003-05-06	Hailey, Jr. et al.
<input type="checkbox"/>	49	6581689	2003-06-24	Hailey, Jr.
<input type="checkbox"/>	50	6588506	2003-07-08	Jones
<input type="checkbox"/>	51	6588507	2003-07-08	Dusterhoft et al.

### US Published Applications

Note: Applicant is not required to submit a paper copy of cited US Published Applications

init	Cite.No.	Pub. No.	Date	Applicant	Kind	Class	Subclass
<input type="checkbox"/>	1	20020157837	2002-10-31	Bode et al.			

### Signature

Examiner Name	Date
	3/16/05

PTO/SB/08A (02-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**(Use as many sheets as necessary)**

Sheet	1	of	1
-------	---	----	---

**Complete if Known**

Application Number	10/624,109
Filing Date	July 21, 2003
First Named Inventor	David E. McMechan et al.
Art Unit	3672
Examiner Name	Unassigned
Attorney Docket Number	1301-1135

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

[illegible]

**Examiner  
Signature**

Date Considered	
-----------------	--

3/16/05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**(Use as many sheets as necessary)**

Sheet 1

of 2

**Complete if Known**

Application Number	10/624,109
Filing Date	July 21, 2003
First Named Inventor	David E. McMechan et al.
Art Unit	3672
Examiner Name	Unassigned
Attorney Docket Number	1301-1135

## U. S. PATENT DOCUMENTS

[illegible]

## FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>2</sup>
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY			
<del>USA</del>		WO 99/12630	03-18-1999	Gillespie et al.		
<del>USA</del>		WO 00/61913	10-19-2000	Jones		
<del>USA</del>		EP 1 132 571 A1	02-16-2001	Dusterhoft et al.		
<del>USA</del>		WO 01/14691 A1	03-01-2001	Jones et al.		
<del>USA</del>		WO 01/42620 A1	06-14-2001	Bixenman et al.		
<del>USA</del>		WO 01/44619 A1	06-21-2001	Tibbles et al.		

**Examiner  
Signature**

Date  
Considered

3/16/08

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of Information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**

PTO/SB/08A (02-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

**(Use as many sheets as necessary)**

**Compleat if Known**

Application Number	10/624,109
Filing Date	July 21, 2003
First Named Inventor	David E. McMechan et al.
Art Unit	3672
Examiner Name	Unassigned
Attorney Docket Number	1301-1135


Sheet	2	of	2
-------	---	----	---

## U. S. PATENT DOCUMENTS

[illegible]

**FOREIGN PATENT DOCUMENTS**

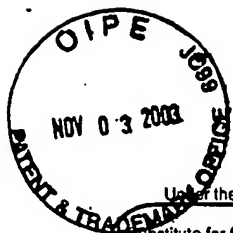
Examiner Initials*	Cite No. <sup>1</sup>	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T <sup>d</sup>
		Country Code <sup>2</sup> -Number <sup>4</sup> -Kind Code <sup>3</sup> (if known)	MM-DD-YYYY			
6077		WO 01/49970 A1	07-12-2001	Morton et al.		
616		WO 02/10554 A1	02-07-2002	Jones		

Examiner Signature		Date Considered	3/16/2005
-----------------------	---	--------------------	-----------

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. <sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup> Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup> Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. **DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.**

**If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.**



PTO/SB/08B (02-03)  
Approved for use through 04/30/2003. OMB 0651-0031  
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

<b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  (Use as many sheets as necessary)		<b>Complete if Known</b>	
		Applicant Number	10/624,109
		Filing Date	July 21, 2003
		First Named Inventor	David E. McMechan et al.
		Art Unit	3672
		Examiner Name	Unassigned
Sheet 1	of 2	Attorney Docket Number	1301-1135

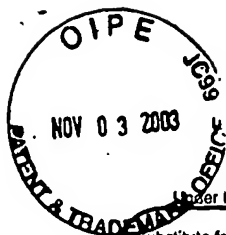
OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
LEWIS		RESTARICK of Otis Engineering Corp.; "Mechanical Fluid-Loss Control Systems Used During Sand Control Operations"; 1992; Pages 21-36.	
		Halliburton Energy Services, Inc.; "Sand Control Screens"; 1994; 4 pages.	
		EBINGER of Ely & Associates Inc.; "Frac Pack Technology Still Evolving"; 1995; Pages 60-70; Oil & Gas Journal.	
		HAILEY and COX of Halliburton Energy Services, Inc. and JOHNSON of BP Exploration (Alaska); "Screenless Single Trip Multizone Sand Control Tool System Saves Rig Time"; February 2000; Pages 1-11; Society of Petroleum Engineers Inc.	
		Halliburton Energy Services, Inc.; "Caps Sand Control Service for Horizontal Completions Improves Gravel Pack Reliability and Increases Production Potential from Horizontal Completions"; August 2000; 2 pages.	
		Halliburton Energy Services, Inc.; "CAPS Concentric Annular Packing Service for Sand Control"; August 2000; 4 pages.	
		SALDUNGARAY of Schlumberger, TRONCOSO and SANTOSO of Repsol-YPF; "Simultaneous Gravel Packing and Filter Cake Removal in Horizontal Wells Applying Shunt Tubes and Novel Carrier and Breaker Fluid"; March 2001; Pages 1-6; Society of Petroleum Engineers, Inc.	
		Schlumberger; "QUANTUM Zonal Isolation Tool"; Pages 12-13; Sand Face Completions Catalog.	
		Halliburton Energy Services, Inc.; "Absolute Isolation System (AIS) Components"; 1 page.	
TECH		OSCA Corporate Headquarters; "HPR-ISO System"; 2000; 1 page; Technical Bulletin.	

Examiner Signature		Date Considered	3/16/05
--------------------	--	-----------------	---------

\*EXAMINER: If reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.



PTO/SB/089 (02-03)

Approved for use through 04/30/2003. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Substitute for form 1449/PTO

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

**Complete if Known**

Applicant Number	10/624,109
Filing Date	July 21, 2003
First Named Inventor	David E. McMechan et al.
Art Unit	3672
Examiner Name	Unassigned
Attorney Docket Number	1301-1135

Sheet	2	of	2
-------	---	----	---

**OTHER PRIOR ART-NON PATENT LITERATURE DOCUMENTS**

Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T <sup>2</sup>
CEA		OSCA Corporate Headquarters; "The ISO System"; 2000; 1 page; Technical Bulletin	

Examiner  
SignatureDate  
Considered

3/16/05

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup> Applicant's unique citation designation number (optional). <sup>2</sup> Applicant is to place a check mark here if English language Translation is attached. This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 120 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, Washington, DC 20231. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, Washington, DC 20231.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.